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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/518,798 | 11/07/2005 | Toshihiko Oyama | 04-667 | 3629 |
| 34704 | 7590 | 08/28/2006 | EXAMINER | |
| BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510 | | | HAFIZ, MURSALIN B | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2814 | |

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

B/C

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/518,798 | Applicant(s) OYAMA ET AL. | |
| | Examiner Mursalin B. Hafiz | Art Unit 2814 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-5 and 13-19 in the reply filed on June 15, 2006 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the lens" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

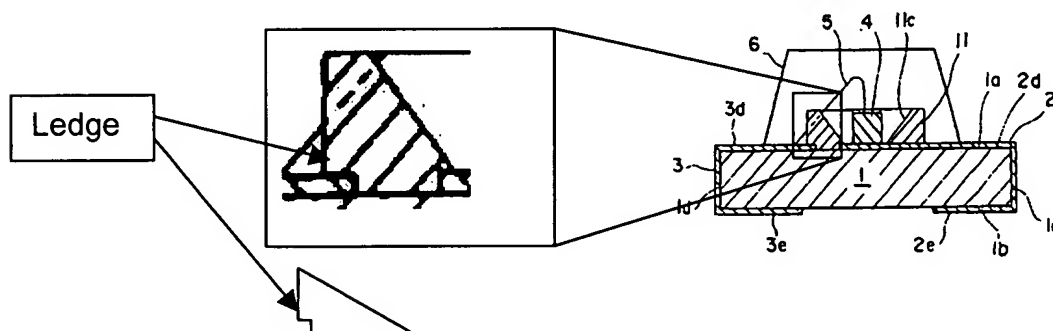
Claims 1, and 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Honda (JP 11340517 A).

Regarding claim 1, Honda disclose in Fig. 2, a semiconductor light emitting device comprising a metallic support plate [2d]; a light-reflective reflector [11] mounted on the support plat and formed with a upwardly diverging; a semiconductor light emitting

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element [4] mounted on the support plate within the hole of the reflector, the light emitting element having a first electrode electrically connected to the support plate; a first wiring conductor [2e] electrically connected to the support plate; a second wiring conductor [5] electrically connected to a second electrode of the light emitting element; and a heat-resistible plastic encapsulant [6] for sealing at least an outer periphery of the reflector, an upper surface of the support plate, each inner end of the first and second wiring conductor.

Regarding claim 13, Honda disclosed in Fig. 2, a semiconductor light emitting device comprising a support plate [2d]; a light-reflective reflector [11] mounted on the support plate and formed with a hole upwardly diverging; and a semiconductor light emitting element [4] mounted on the support plate within the hole of the reflector;



Wherein the reflector has a ledge connected to a wiring conductor to electrically connect the light emitting element and wiring conductor through the ledge.

Regarding claim 14, Honda disclosed the ledge is electrically connected to the wiring conductor via brazing metal [product by process].

Regarding claim 15, Honda disclosed in Fig. 2, a lead wire [5] electrically connects the semiconductor light emitting element and flat area formed in the reflector.

Regarding claim 16, Honda disclosed in Fig. 2, a reflector for a semiconductor light emitting device, comprising:

- a reflector block [11] mounted on a support plate [2d] and formed with a hole for defining a reflective surface upwardly expanding, the reflector block surrounding a semiconductor light emitting element [4] for upwardly reflecting light from the semiconductor light emitting element;

- a notch [where wire 5 pass through the reflector] extending through the reflector block from the hole to an outer side surface between the semiconductor light emitting element [4] and wiring conductor [3d]; and

- a lead wire [5] passing through the notch for electrically connecting the semiconductor light emitting element and wiring conductor.

Regarding claim 17 and 18, Honda disclosed in Fig. 2, filler received in the notch through which the lead wire extends and filler forms a part of the reflector [product by process limitation, end product is product of Fig. 2].

Regarding claim 19, Honda disclosed in Fig. 2, a semiconductor light emitting device comprising a support plate [2d]; a light-reflective reflector having a reflector block [11] which is mounted on the support plate or integrally formed with the support plate, the reflector being formed with a hole upwardly expanding; a semiconductor light emitting element [4] mounted on the support plate within the hole of the reflector; a first wiring conductor [2e] electrically connected to one electrode of the light emitting

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element; a second wiring [3d] conductor electrically connected to the other electrode of the light emitting element through a lead wire [5]; and a plastic encapsulant for sealing at least the hole of the reflector;

Wherein the reflector has a notch [where wire 5 pass through the reflector] which passes through the reflector block between the hole and an outer side wall and between the light emitting element and wiring conductor;

The lead wire [5] passes through the notch to electrically connect the light emitting element and wiring conductor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda (JP 11340517 A) in view of Waitl et al (US 2004/0201028 A1).

Regarding claim 2, Honda does not disclose a lens formed of light-transmittable or transparent resin for covering upper surfaces of the reflector and plastic encapsulant. However, Waitl et al teaches in Fig. 2c, an analogous device wherein a lens formed of light-transmittable or transparent resin [upper part of 16]for covering upper surfaces of the reflector and plastic encapsulant. It would have been obvious to one of ordinary skilled in the art at the time of the invention was made to incorporate Waitl et al's teaching into Honda's device at least to focus the light.

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Regarding claim 3, Honda does not disclose a light-transmittable or transparent cover for covering a hole of the reflector. However, Waitl et al teaches in Fig. 2c, an analogous device wherein a light-transmittable or transparent cover [lower part of 16] for covering a hole of the reflector. It would have been obvious to one of ordinary skilled in the art at the time of the invention was made to incorporate Waitl et al's teaching into Honda's device at least to focus the light.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda (JP 11340517 A).

Regarding claim 4, Honda disclosed supporting plate [2d] is formed of a metallic material. But, fails to explicitly disclose the material having conductivity equal to or more than 190 kcal/mh°C. However, the range would have been obvious to an ordinary skilled in the art because, absent evidence of disclosure of criticality for the range giving unexpected results, it is not inventive to discover optimal or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955). Furthermore, the specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom. Where patentability is aid to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. See *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mursalin B. Hafiz whose telephone number is 571-272-8604. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mbh


HOAI PHAM
PRIMARY EXAMINER